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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,749	10/08/2001	Charles D. Gollnick	14408US01	5342

7590 10/01/2003
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EXAMINER

VUONG, QUOCHIE B

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 10/01/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/972,749

Applicant(s)

GOLLNICK ET AL.

Examiner

Quochien B Vuong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-4, 6-7, and 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahany (US 4,910,794) in view of Freeburg. (US 4,850,032).

As to claim 1, Mahany discloses a data communication system (figures 1 and 6) having a plurality of mobile transceiver units 12 communicative with a base transceiver unit 72, a network controller 71 intercommunicative between the base transceiver units and one or more host computer 74, for data interchange therebetween wherein the base transceiver unit 72 can operate with different data rates (see figures 1 and 6, columns 7-8). In this case, the connections of blocks 71 and 72 read on the port means

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as claimed. Since only one base station 70 is utilized, Mahany fails to disclose that the network controller 71 manages communication among a plurality of base transceiver units. Freeburg teaches a network controller 102 managing communication among a plurality of base transceiver units 111 and a host computer 180 (see figures 1 and 2). It is important to note that the programmable network controller 102 is physically separate from the base transceiver units (see figures 1-2, col. 3 lines 29-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of Freeburg to Mahany, in order to expand the coverage areas of the data communication system (as suggested by Freeburg, column 2 lines 16-20 which states that "System 100 may provide data communications to subscriber radios 190 located anywhere in a large geographical area that is divided into a plurality of cells or zones, each of which is covered by one or more base station radios 130-132," emphasis added by the examiner).

As to claims 2, 7, figures 1 and 6 of Mahany reads on the claimed limitation.

As to claim 3, as set forth above, Mahany and Freeburg as a whole does include multiple interface means (Mahany requires that the base transceiver unit operates with multiple data rates), but fails to disclose the above interface means being RS232C. The examiner takes Official Notice that all of the above interface means are known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the above combination as claimed, so that the data communication system can be easily implemented with interface means already existing in the market.

As to claim 4, as Mahany is modified with Freeburg for the reasons as set forth above, it would read on the claimed limitation of a multiplicity of data communication ports thereon and at least two of the communication ports being software-controllable to select among a plurality of interface means (Mahany requires that the base transceiver unit operates with multiple data rates).

As to claim 6, the above combination of Mahany and Freeburg fails to disclose a spread spectrum means as claimed. The examiner takes Official Notice that such a spread spectrum means is known in the art for the purpose of reducing noise and interference. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the above combination as claimed, in order to reduce noise and interference in the data communication system.

As to claim 9, as set forth above, Mahany and Freeburg as a whole does include multiple interface means (Mahany requires that the base transceiver unit operates with multiple data rates), but fails to disclose the above interface means being RS232, RS485, RS422, V.35. The examiner takes Official Notice that all of the above interface means are known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the above combination as claimed, so that the data communication system can be easily implemented with interface means already existing in the market.

As to claims 10-12, and 15-16, they are rejected for the same reasons as set forth in claims 3 and 9 above.

As to claims 13, 18, the combination of Mahany and Freeburg fails to disclose more than one host computer or a second data processor. The examiner takes Official Notice that using more than one host computer or a second data processor in a data communication system is known in the art for the purpose of increasing the system capacity. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the above combination as claimed, so that more data can be communicated within the system.

As to claims 14, 19, figures 1, 6 of Mahany and figures 1-2 of Freeburg read on the claimed limitation.

As to claim 17, the combination of Mahany and Freeburg fails to disclose a diagnostic device as claimed. The examiner takes Official Notice that such a diagnostic device is known in the art for the purpose testing or monitoring the system operation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the above combination as claimed, in order to testing or monitoring the system operation.

As to claim 20, Mahany fails to expressly disclose the host computer 74 also operating with multiple data rates. However, since the host computer and base transceiver unit in figure 6 communicate with each other and since the base transceiver unit operates with more than one data rate, those skilled in the art would have appreciated that the host computer should also operate with multiple data rates in order to be compatible with the base transceiver unit. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the above

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combination as claimed, so that the host computer and base transceiver unit can properly communicate with each other.

3. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahany in view of Freeburg as applied to claim 4 above, and further in view of Harrison (US 5,181,200).

As to claim 5, the above combination of Mahany and Freeburg fails to disclose a serially interconnection over a single twisted pair as claimed. Such a serially interconnection, however, is known in the art as described by Harrison (see figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of Harrison to the above combination, in order to have a simple way of interconnecting the base transceiver units. Mahany, Freeburg, and Harrison do not specifically disclose interconnection over a single twisted pair. However, the examiner takes Official Notice that interconnection over a single twisted pair is known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the above combination as claimed, so that the data communication system can be easily implemented over the single twisted pair.

As to claim 8, as set forth above, Mahany and Freeburg as a whole does include multiple interface means (Mahany requires that the base transceiver unit operates with multiple data rates), but fails to disclose the above interface means being RS485. The examiner takes Official Notice that all of the above interface means are known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

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invention to modify the above combination as claimed, so that the data communication system can be easily implemented with interface means already existing in the market.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rubin (US Patent Number 4,788,543) discloses apparatus and method for broadcasting priority rated messages on a radio communications channel of a multiple transceiver system.

5. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2021

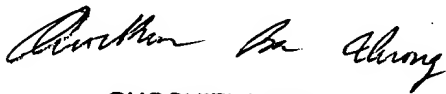
Crystal Drive, Arlington, VA 22202. Sixth Floor (Receptionist).

Any inquiry concerning this communication from the examiner should be directed to Quochien B. Vuong whose telephone number is (703) 306-4530. The examiner can normally be reached on Monday through Friday from 9:30 a.m. to 6:00 p.m. EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached on (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service whose telephone number is (703) 306-0377.



QUOCHIEB VUONG
PATENT EXAMINER

Quochien B. Vuong

Sep. 22, 2003.